L 23038-66
ACC NR: AT6008673 O

formulae

$$N\sigma^m = \text{const}, \text{ at } t = \text{const},$$

$$Nt^p = \text{const}, \text{ at } \sigma = \text{const}.$$

Log σ versus log N, and log t versus log N curves were obtained for all three specimens over a temperature range of 300--800C. The results show that the strength of these heat-resistant materials under cyclic loading depends first on the nature and intensity of structural changes in the metal during the test and, second, on the duration of the thermal stresses. The largest effect of the variable temperature parameters on the fatigue strength of the metals was observed in the temperature regime where noticeable structural processes were absent. Orig. art. has: 4 tables, 2 formulas, and 1 figure.

SUB CODE: 11, 13/ SUBM DATE: 19Aug65

Card 2/2 IC

ACC NR: AT7005723 (A) SOURCE CODE: UR/2563/66/000/267/0015/0021

AUTHOR: Lebedev, T. A.; Korneyev, N. I.; Marients, T. K.; Kalugin, V.F.; Krupin, V. G.; Kabanov, Yu. N.

ORG: none

TITLE: Technology of production and properties of high-strength steel strip

SOURCE: Leningrad. Politekhnicheskiy institut. Trudy. no. 267, 1966, Avtomatizatsiy i tekhnologiya mashinostroyeniya (Automation and technology in the machinery industry), 15-21

TOPIC TAGS: stainless steel, high strength steel, ~~steel strip~~, ~~strip~~ metal rolling, ~~strip~~ mechanical property, ~~rolling technology~~/2Kh15N5AM3 steel

ABSTRACT: A technology for industrial production of high-strength steel strip has been developed. The technology utilizes the strain hardening of austenitic-martensitic type steels in thermomechanical treatment done with the use of rolling stands with multiple rollers of relatively small diameter and large supporting rollers. High-strength strip, 0.165 mm thick, was produced by rolling with an 80% reduction 2Kh15N5AM3 stainless steel containing (%): 0.24 C, 0.80 Si, 0.80 Mn, 14.50 Cr, 4.0 Ni, 2.8 Mo and 0.06 N_2. A partial transformation of austenite into martensite occurred in steel during

Card 1/2 UDC: none

ACC NR: AT7005723

rolling, while a reverse transformation occurred with tempering, probably because of nitrogen diffusion in the α-phase. A relatively low ($1.85 \cdot 10^4$ kg/mm^2) modulus of the normal elasticity can be explained by a high degree of strain hardening. A tensile strength of about 272, 280 and 290 kg/mm^2 was obtained with aging at -200, +100 and 395°C, respectively, at an almost constant elongation of 0.75% in the -200—+300°C range. Nontempered and tempered (regardless of the conditions) specimens had a 0.98—0.99 ratio of (0.2) yield strength to tensile strength. Transverse specimens had a slightly higher tensile strength than the longitudinal. The metal also had a low stress sensitivity factor of 1.07 and 1.17 for longitudinal and transverse specimens, respectively. The best strength characteristics were obtained with aging at 395°C. Subzero treatment to bring about the γ-α phase transformation was unsuccessful, probably because of the stabilization of austenite. The ductility (the elongation-to-hardness ratio) was constant for all aging conditions up to 450°C. The fatigue strength, determined on the basis of 10^6 cycles, was 90 kg/mm^2. Orig. art. has: 6 figures. [MS]

SUB CODE: 11,13/ SUBM DATE: none/ ATD PRESS: 5117

Card2/2

ACC NR: AT7005725 SOURCE CODE: UR/2563/66/000/267/0026/0031

AUTHORS: Gorbakon', A. A.; Lebedev, T. A.; Marinets, T. K.

ORG: none

TITLE: Possible ways for increasing the fatigue strength of heat-resistant alloys

SOURCE: Leningrad. Politekhnicheskiy institut. Trudy. no. 267, 1966. Avtomatizatsiya i tekhnologiya mashinostroyeniya (Automation and technology in the machinery industry), 26-31

TOPIC TAGS: heat resistant alloy, metal property, high temperature fatigue, fatigue strength/ EI867 heat resistant alloy, EI437B heat resistant alloy

ABSTRACT: The effects of thermomechanical treatments on the fatigue strength of heat resistant alloys EI867 and EI437B were investigated. The initial heat treatment consisted of quenching from 1220C, air cooling, aging for 8 hours at 950C, air cooling (for EI867) and quenching from 1080C, air cooling, and aging at 700C for 16 hours followed by air cooling (for EI437B). Fatigue curves for EI867 alloy after 6 different types of thermomechanical treatment are presented and compared with the untreated behavior. Fatigue curves for alloy EI437B are presented for the untreated metal and for one type of thermomechanical treatment. After a discussion of the structural effects of the treatments (sample micrographs are presented), it is concluded that thermomechanical treatment increases the fatigue strength of dispersion hardening

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ACC NR: AT7005725

alloys only when the plastic deformation temperature during the hot working is below the aging temperature of the alloy. Repeated thermomechanical treatment is even more effective (below the aging temperature). Orig. art. has: 7 figures, 1 table, and 1 formula.

SUB CODE: 13/ SUBM DATE: none/ ORIG REF: 009

Card 2/2

LEBEDEV, T. I.

3(5) PHASE I BOOK EXPLOITATION SOV/2172

Akademiya nauk SSSR. Mezhduvedomstvennaya postoyannaya komissiya po zhelezu

Zhelezorudnyye mestorozhdeniya Altaye-Sayanskoy gornoy oblasti, tom. 1, kniga. 1: Geologiya (Iron Ore Deposits of the Altay-Sayan Mountain Region, Vol 1, Book 1: Geology) Moscow, 1958. 350 p. (Series: Zhelezorudnyye mestorozhdeniya SSSR) Errata slip inserted. 2,500 copies printed.

Additional Sponsoring Agencies: Akademiya nauk SSSR. Sibirskoye otdeleniye, USSR. Gosudarstvennaya planovaya komissiya. Glavnoye upravleniye nauchno-issledovatel'skikh i proyektnykh organizatsiy, Institut Giproruda, USSR. Ministerstvo geologii i okhrany nedr, USSR. Zapadno-Sibirskoye geologicheskoye upravleniye, USSR. Krasnoyarskoye geologicheskoye upravleniye, Sibirskiy geofizicheskiy trest, Vsesoyuznyy nauchno-issledovatel'skiy geologicheskiy institut.

Eds. of the vol.: P. Ye. Sledzyuk, and G.A. Sokolov; Resp. Ed. of Series: I.P. Bardin, Academician; Scientific Eds.: I.P. Bardin, Academician, T.F. Gorbachev, A.L. Dodin, N.A. Yerofeyev, A.S. Kalugin, N.N. Nekrasov, G.L. Pospelov, M.L. Skobnikov, P. Ye. Sledzyuk, S.S. Smirnov-Verin (Deceased) G.A. Sokolov, S.G. Strumilin, Academician, V.B. Khlebnikov, N.A. Chinakal, and I.S. Shapiro; Ed. of Publishing House: I.G. Kudasheva; Tech. Ed.: I.F. Kuz'min.

PURPOSE: This book is intended for structural, exploration and mining geologists, for geophysicists and mineralogists, and industrial planners.

COVERAGE: This work purports to be the first attempt to review and summarize all the material that has been published on the iron-ore deposits of the Altay-Sayanskaya oblast' during the last 20 years. This area, the work reports is fast becoming one of the most important iron-ore bases in the Soviet Union. The book discusses the economic aspects of the geography and geology of the individual deposits, presents a qualitative and quantitative (as of January 1, 1957) analysis of ore reserves, and evaluates the prospects and possibilities of further development of the Altay-Sayanskaya iron-ore base. The genetic characteristics of iron-ore mineralization of the area are described. Extensive information on the geology of individual deposits, complexes, and regions is provided, and a general genetic description of ore mineralization in the Altay Sayanskaya region is given. There is a historical account of the exploration and development of the region, and of the development of concepts on the genesis of mineralization in the area. The following scientists participated in the preparation and writing of this volume: G.L. Pospelov, S.S. Lapin, N.Kh. Belous. V.M. Klyarovskiy, O.G. Kine, and V.A. Vakhrushev of the West Siberian Branch of the AN SSSR, I.S. Shapiro of the Permanent Interdepartmental Committee on Iron, A.S. Kalugin, A.S. Mukhin, N.A. Gardets, Yu. A. Speyt, M.I. Selivestrova, V.G. Rutkevich, G.P. Bykov, N.I. Nikonov, and K.G. Sakovich of the West Siberian Geological Administration V.I. Medvedkov, A.S. Aladyshkin and F. Ya. Pan of the Krasnoyarsk Geological Administration, M.G. Rusanov, E.A. Yazbutis, Yu. V. Rozhdestvenskiy, G. Ye. Savitskiy, and A.D. Prodanchuk of the West Siberian Geological Survey Chermetrazvedka Trust, P.A. Lysenko, T. I. Lebedev, T.Ya. Kamenskaya, A.I. Maslennikov and R. Pipar of the Siberian Geophysical Trust, A.L. Dodin of the VSEGEI, A.S. Mitropol'skiy of the Mining Expedition, V.A. Lukin of the Mining Administration of the Kuznetsk Metallurgical Combine, S.S. Linin of the Tomsk Polytechnic Institute, I.V. Dorbikov of the Sibneftegeofizika Trust, and V.G. Korel' of the Siberian Metallurgical Institute. There are 103 diagrams including insert maps and 10 tables. There are 271 references, all Soviet.

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AVAILABLE: Library of Congress

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LEBEDEV, T.S.

On the nature of the Chernygov magnetic anomaly. Dop. AN URSR no.5:475-478 '56. (MLRA 10:2)

1. Institut geologichnikh nauk Akademii nauk URSR. Predstavleno akademikom Akademii nauk USSR V.G. Bondarchukom.
(Ukraine--Magnetism, Terrestrial)

LEBEDEV, T.S.; KRAVETS', V.V.

P.T. Pasal's'kyi, outstanding scientist and geophysicist of the latter part of the 19th century. Geol.zhur. 16 no.2:78-79 '56. (MLRA 9:9)

(Pasal's'kyi, Pavel Tymofiiovych, 1871-1956)

LEBEDEV, T.S.

G.E. Riabukhin's article on the "Tectonic structure of the Dnieper-Donets Depression". Geol.nefti 1 no.1:78-79 Ja '57. (MLRA 10:8)
(Dnieper Lowland--Geology, Structural)
(Donets Basin--Geology, Structural)

LEBEDEV, T.S.

BONDARENKO, B.V. (Minsk); LEBEDEV, T.S. (Kiyev)

P.T. Pasal'skii and his contribution to geophysics. Vop.ist.est. i tekh. no.5:182-187 '57. (MIRA 11:2)
(Pasal'skii, Pavel Timofeevich, 1871-1900)

LEBEDEV, T.S.

Density characteristics of the geological cross section of the Pripet Depression. Prikl. geofiz. no.16:200-209 '57. (MLRA 10:8)
(Pripet Marshes--Geology, Stratigraphic)

Lebedev, T.S

LEBEDEV, T.S.

All-Ukrainian conference on preparations for the International Geophysical Year. Geol. zhur. 17 no.2:93-94 '57. (MLRA 10:11)
(International Geophysical Year, 1957-1958)

LEBEDEV, T.S.

Conference of Ukrainian participants in the International Geophysical Year. Visnyk AN URSR 28 no.5:65-66 My '57. (MLRA 10:7)

(Ukraine--International Geophysical Year, 1957-1958)

LEBEDEV, T.S.

Geological interpretation of gravitational anomalies in the Pripet fault. Sov. geol. no.61:101-111 '57. (MIRA 11:4)

1. Institut geologicheskikh nauk USSR.
(Pripet Valley--Gravity)

SOV/169-59-6-5656

Translation from: Referativnyy zhurnal, Geofizika, 1959, Nr 6, p 32 (USSR)

AUTHOR: Lebedev, T.S.

TITLE: The Gravitational and Magnetic Anomalies of the Pripyat' Depression and Their Connection With the Geological Structure

PERIODICAL: Tr. in-ta geol. nauk AN USSR. Ser. geofiz., 1958, Nr 2, pp 27-42

ABSTRACT: Based on the generalization of data of geophysical investigations, performed during the post-war years, the correlation between the character of the gravitational and the magnetic fields and the properties of the geologo-tectonic structure of the region in question is studied. Three large, isolated, negative anomalies are distinguished within the boundaries of the Pripyat' regional minimum of gravity forces. They are differing from each other by clearly expressed sublatitudinal strikes, by the presence of great gradients (up to 5 - 7 m-gal/km) and by a complicated structure. The existence of direct and reciprocal ratios between the anomalies Δg and z_a has been established. The basic density boundaries have been determined: pre-Cambrian ($\Delta\sigma = +0.2$ g/cm^3),

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The Gravitational and Magnetic Anomalies of the Pripyat' Depression and Their Connection With the Geological Structure

carbonate-sulfate strata of the upper Devonian formation ($\Delta\sigma$ = + 0,4 g/cm^3) and Permian deposits ($\Delta\sigma$ = + 0,2 g/cm^3). The first two are more clear and consistent in respect to their area (RZhGeofiz, 1958, 141). The factors causing the anomaly of the gravitation field have been determined: a) changes in the surface relief of the Pre-Cambrian; b) the nonuniformity of the material composition (and also the density) of the Pre-Cambrian rocks; c) structural-morphological peculiarities and changes in the lithology of Paleozoic deposits. The factors influencing the magnetic field are: a) nonuniformity of the material composition of the Pre-Cambrian formation; b) the spread of granitoid rocks in the lower parts of the depression ($\chi_{aver.} \approx 300 \cdot 10^{-6}$ CGSM); c) the presence of gabbro-type rocks in the outcrops of the foundation ($\chi_{aver.} = 5,500 \cdot 10^{-6}$ CGSM); d) the intrusion of effusives into the sedimentary stratum, originating from deep-seated fractures ($\chi_{aver.} \approx 6000 \cdot 10^{-6}$ CGSM). The sedimentary deposits detected in the depression are practically non-magnetic. There are two clearly defined zones of faults limiting the depression in the north and south. The tectonic border with the Dnepr-Donets depression has been traced. The nature of the Chernigov anomaly has been characterized (RZhGeofiz, 1957,

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The Gravitational and Magnetic Anomalies of the Pripyat' Depression and Their Connection With the Geological Structure SOV/169-59-6-5656

9918). The difference in the structure of the gravitational and magnetic anomalies of the Pripyat' and the Dnepr-Donets depressions are connected with the differences in the geological structure of the aforementioned regions. In this way, the Pripyat' depression may be considered as an independent geostructural element in the body of the Russian platform. The tectonics of the second-order structures are discussed in detail. The Pripyat' depression is a graben-like lowering of a series of large blocks of the Pre-Cambrian base to a considerable depth (up to 4.5 - 5.0 km). This base originated in the middle Devonian period or in the lower Paleozoic era. Bibl. 19 titles. (In-t geol. nauk AN USSR - Institute of Geological Sciences of the AS, UkrSSR)

P.S. Lebedev

Card 3/3

LEBEDEV, T.S.

Studying the density of Paleozoic deposits in the Pripet depression. Trudy Inst. geol. nauk AN URSR. Ser. geofiz. no.2:138-151 '58. (MIRA 11:6)

1. Institut geologicheskikh nauk AN USSR.
(Pripet Valley--Geology, Stratigraphic)

LEBEDEV, T.S.

In memory of Otto IUl'evich Shmidt. Trudy Inst. geol. nauk AN URSR. Ser. geofiz. no.2:200-203 '58. (MIRA 11:6)
(Shmidt, Otto IUl'evich, 1891-1956)

LEBEDEV, T.S

26-58-5-18/57

AUTHOR: Lebedev, T.S., Candidate of Geological and Mineralogical Sciences

TITLE: On the Causes of the Chernigov Force-of-gravitation Anomaly (O prichinakh Chernigovskoy anomalii sily tyazhesti)

PERIODICAL: Priroda, 1958, Nr 5, pp 79-81 (USSR)

ABSTRACT: The hypotheses offered by V.S. Zavistovskiy, S.I. Subbotin, V.A. Sel'skiy, and I.A. Balabushevich, in order to explain the Chernigov gravitation anomaly, did not explain the phenomenon satisfactorily and were too much concerned with causes that had occurred at great depths within the earth. Recent drilling and rock sample analysises from depths between 1,587 and 2,751 m revealed that ground magma in pre-Cambrian periods had been thrown up through cracks and fissures, whereby effusive rock was intermingled with sedimentary rock. This process had also continued through the Upper Cambrian period and this brought about the summarizing effect of a gravitation anomaly.
There is one schematic map and 5 Soviet references.

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On the Causes of the Chernigov Force-of-gravitation Anomaly 26-58-5-18/57

ASSOCIATION: Institut geologicheskikh nauk Akademii nauk Ukrainskoy SSR, Kiyev (Institute of Geological Sciences of the Ukrainian SSR Academy of Sciences, Kiyev)

AVAILABLE: Library of Congress

Card 2/2 1. Gravity - Measurement 2. Gravitation anomaly - Analysis 3. Chernigov force-of-gravitation anomaly

LEBEDEV, T.S.

SOV-21-58-8-16/27

AUTHORS: Bondarchuk, V.G., Member of the AS UkrSSR, Kondrachuk, V.Yu., Krutikhovskaya, Z.A., Lebedev, T.S., Mikhaylova, N.P., and Sollogub, V.B.

TITLE: Hypsometric Chart of the Surface of the Precambrian Foundation of the UkrSSR and Some Adjacent Areas (Skhema gipsometrii poverkhnosti dokembriyskogo fundamenta USSR i nekotorykh sopredel'nykh territoriy)

PERIODICAL: Dopovidi Akademii nauk Ukrains'koi RSR, 1958, Nr 8, pp 863-866 (USSR)

ABSTRACT: The old charts of the Precambrian foundation within the Ukraine compiled by A.D. Arkhangel'skiy (Ref. 1) and other investigators, of which the most detailed is the chart by E.E. Fotiadi (Ref. 15) are mostly obsolete and do not correspond to the present level of the geologico-geophysical knowledge of the Ukraine territory. Making use of charts compiled by F.A. Rudenko, G.M. Kozlovskaya, V.T. Syabryay, K.M. Varava, R.I. Andreyeva for individual regions and based on the results of electrosurveys by V.I. Klushin, gravimetric investigations by S.I. Subotin and prospecting drilling, in 1957 the authors compiled a hypsometric chart of the surface of the Precambrian crystalline

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Hypsometric Chart of the Surface of the Precambrian Foundation of the UkrSSR and Some Adjacent Areas

foundation of the Ukrainian SSR and certain adjacent areas on a scale of 1 : 750,000. The contemporary surface of the Precambrian foundation has a peculiarly disjointed relief which in its fundamental features accords with the features of the tectonic structure of the areas considered.
There is 1 geological chart and 16 Soviet references.

ASSOCIATION: Institut geologicheskikh nauk AN UkrSSR (Institute of Geological Sciences of the AS UkrSSR)

SUBMITTED: March 18, 1958

NOTE: Russian title and Russian names of individuals and institutions appearing in this article have been used in the transliteration.

1. Geology--USSR 2. Geophysics--USSR

BERNADSKAYA, L.G. [Bernads'ka, L.H.]; LEBEDEV, T.S. [Lebediev, T.S.]

Rocks of the crystalline foundation of the Narovlya area (Pripet Depression). Geol.zhur. 18 no.5:47-54 '58. (MIRA 12:1)

(Narovlya region--Rocks, Crystalline and metamorphic)

LEBEDEV, T.S. [Lebediev, T.S.], kand.geol.nauk; PANCHENKO, D.Yu. [Panchenko, D.IU.], kand.geol.nauk

Some results of work of the scientific geological "Wednesdays." Visnyk AN URSR 29 no.2:62-66 F '58. (MIRA 11:4)
(Ukraine--Geological research)

LEBEDEV, T.S. [Lebediev, T.S.], kand. geol.-mineral. nauk.

Second all-Ukrainian conference of the participants of the International Geophysical Year. Visnyk AN URSR 29 no.3:56-62 Mr '58. (MIRA 11:5)
(International Geophysical Year, 1957-1958)

LEBEDEV, T.S. [Lebediev, T.S.], kand.geol.-min.nauk

Research by Ukrainian scientists on aspects of the program of the International Geophysical Year. Visnyk AN URSR 29 no.12: 36-45 D '58. (MIRA 12:1)
(Ukraine--International Geophysical Year, 1957-1958)

LEBEDEV, T.S., kand. geol.-mineral. nauk.

Causes of the Chernigov gravity anomaly. Priroda 47 no.5:79-81 My '58. (MIRA 11:5)

1. Institut geologicheskikh nauk AN USSR, Kiev.
(Chernigov Province--Gravity)

BONDARCHUK, V.G.; SOLLOGUB, V.B.; KONDRACHUK, V.Yu.; KRUTIKHOVSKAYA, Z.A.; LEBEDEV, T.S.; MIKHAYLOVA, N.P.

Surface relief of the pre-Cambrian crystalline foundation in the Ukrainian and Moldavian S.S.R. Sov.geol. 2 no.1:41-55 Ja '59. (MIRA 12:4)

1. Institut geologicheskikh nauk AN USSR.
(Ukraine--Geology, Structural) (Moldavia--Geology, Structural)

LEBEDEV, T.S. [Lebediev, T.S.], kand. geol.-min. nauk; KRAVETS, V.V. [Kravets', V.V.], kand. geol.-min. nauk

Geophysical research in Hungary. Visnyk AN URSR 30 no.8:60-66 Ag '59. (MIRA 13:1)

(Hungary--Geophysics)

LEBEDEV, T.S.; SOLLOGUB, V.B.

Contribution of Ukrainian scientists to research completed under the program of International Geophysical Year. Mezhdunar. geofiz. god [Kiev] no.2:3-31 '60. (MIRA 14:1)

1. Institute of Geological Science of the Academy of Science of the Ukrainian S.S.R.
(Ukraine—Geophysical research)

LEBEDEV, T.S

S/021/60/000/003/008/010
A232/A029

AUTHORS: Lebedyev, T.S.; Krutykhovs'ka, Z.O.

TITLE: On the Future Ways of the Development of Prospecting Geophysics in the Soviet Union [A Report Based on the Materials of the Vsesoyuzna heofizychna konferentsiya (All-Union Geophysical Conference)]

PERIODICAL: Dopovidi Akademiyi nauk Ukrayins'koyi RSR, 1960, No. 3, pp.387 - 391

TEXT: The Vsesoyuzna heofizychna konferentsiya (All-Union Geophysical Conference) was held in Leningrad in 1959. It was dedicated to a wide range of problems of prospecting geophysics: new trends in the methods of prospecting various minerals, like non-ferrous and rare metals, development of modern geophysical equipment, rational methods of interpreting the results of geophysical investigations, new data on the geological structure of various regions, etc. All problems were discussed on plenary sessions and in four sections (structural geophysics, mining geophysics, geophysical equipment and device design, and industrial geophysics). The conference was opened by Professor V.V. Fedyns'kyy, Head of the Viddil heofizyky Ministerstva heolohiyi ta okhorony nadr SRSR (Department of Geophysics of the Ministry of Geology and Mineral Deposit Protection

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S/021/60/000/003/008/010
A232/A029

On the Future Ways of the Development of Prospecting Geophysics in the Soviet Union [A Report Based on the Materials of the Vsesoyuzna heofizychna konferentsiya (All-Union Geophysical Conference)]

of the USSR). In his report V.V. Fedyns'kyy elucidated the prospects of the development of geophysical prospecting methods, as well as the development of the prospecting of mineral deposits for the period 1959 - 1965. The plenary sessions heard the following reports: A.I. Zaborovs'kyy, Professor of the Moscow University on "The Present State and the Ways of the Development of Engineering Geophysics"; M.I. Sofronov of the Vsesoyuznyy instytut metodyky i tekhniky heofizychnoyi rozvidky - VITR (All-Union Institute of the Methods and Technique of Geophysical Prospecting - VITR) on "New Ways of the Development of Search-and-Prospecting Geophysics"; B.O. Andriyev of the Leninhrads'kyy hirnychyy instytut (Leningrad Institute of Mining) on "Certain Problems and Vistas of the Development of Structural Geophysics"; O.A. Lohachov, Professor of the Leningrad Institute of Mining on "The Possibilities of Increasing the Efficiency of the Aeromagnetic Method During Geological Mapping and Searching for Mineral Deposits"; O.Z. Tunimanov of the Zavod "Geologorazvedka", Leningrad (Plant "Geologorazvedka", Leningrad) "On the Tendency of the Design and Production of Geophysical Equipment", and others. Apart from this, the conclusive plenary sessions of the con-

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S/021/60/000/003/008/010
A232/A029

On the Future Ways of the Development of Prospecting Geophysics in the Soviet Union [A Report Based on the Materials of the Vsesoyuzna heofizychna konferentsiya (All-Union Geophysical Conference)]

ference heard the report by H.I. Petrashen' of the Leningrad University "On the Vistas of Applying the Dynamic Theory of Seismic Wave Propagation in the Seismographic Geophysical Exploration"; Yu.A. Dikhof of the Kazan' University on "The Tectonic Phenomena and Their Causes"; and O.V. Mukhin of the Trest "Ukrheofizrozvidka" (Trust "Ukrheofizrozvidka") on "The State and Development of the Geophysical Service in the Ukraine". In his report on the new trends in the search-and-prospecting geophysics, M.I. Sofronov presented interesting data on the design of modern geophysical equipment in a number of scientific research institutes: the All-Union Institute of Methods and Technique of Geophysical Prospecting, the Instytut fizyky zemli AN SRSR (Institute of the Physics of the Earth, AS USSR), and the Instytut avtomatyky AN URSR (Institute of Automation, AS UkrSSR). The report by Professor B.O. Andryeyev dealt with certain important problems and vistas of the development of structural geophysics (the study of the abysmal structure of the earth's crust, the search for oil- and gas-bearing structures, etc). I.H. Klushin of the Leningrad Institute of Mining read a report "On the Problem of Rating the Stratification Depth of a Crystalline Sub-

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On the Future Ways of the Development of Prospecting Geophysics in the Soviet Union [A Report Based on the Materials of the Vsesoyuzna heofizychna konferentsiya (All-Union Geophysical Conference)]

structure According to the Calculations of the Gravitational and Magnetic Anomalies Under the Conditions of the South-East of the Russian Plateau". The section of mining geophysics heard 18 reports dedicated to the development of theoretical argumentations and to new methods and equipment for searching ore bodies under various geological conditions. Some of these reports are: "The Increase in the Depth of Investigations in Mining Geophysics" by A.H. Tarkhov, Professor of the Moskovs'kyy heolohorozviduval'nyy instytut (Moscow Geological Prospecting Institute); "The Methods and Equipment of Prospecting Blind Mining Structures From Boreholes by Using the Method of Radioscopy" by L.M. Popov of the All-Union Institute of the Methods and Technique of Geophysical Prospecting (Leningrad); "The Experience Gathered in Applying High-Frequency Seismographic Geophysical Exploration Under the Conditions of the Ukrainian Crystalline Shield" by V.B. Solohub of the Instytut heolohichnykh nauk AN URSR (Institute of Geology, AS UkrSSR) and "On the Application of Gravity Prospecting at Ore Deposits" by D.H. Uspens'kyy. The reports by the workers of the All-Union Institute of Methods and Technique of Geophysical Prospecting (Leningrad), such as V.V. Polikarpoch-

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On the Future Ways of the Development of Prospecting Geophysics in the Soviet Union [A Report Based on the Materials of the Vsesoyuzna heofizychna konferentsiya (All-Union Geophysical Conference)]

kin, M.A. Lapp, M.M. Yermolayev, D.V. Palfyerov, A.H. Sen'ko and others were dedicated to the methods of geochemical investigations when searching for gold ore, copper and nickel and rare metal deposits. The reports by A.H. Hramakov and V.S. Hlebovs'ka of the All-Union Institute of Methods and Technique of Geophysical Prospecting (Leningrad) investigated the problems which refer to the utilization of the emanation and gas survey when searching for ore deposits. B.M. Yanovs'kyy, Professor of the Leningrad University, Z.O. Krutykhovs'ka of the Institute of Geological Sciences, AS UkrSSR, and F.M. Yefimov of the Vsesoyuznyy naukovo-doslidnyy heolohorozviduval'nyy naftovyy instytut (All-Union Scientific Research Geological-Prospecting Petroleum Institute, Moscow) dedicated their reports to the elucidation of the problems of magnetism and paleomagnetism of rocks. The report of Z.O. Krutykhovs'ka, (Kiyev), was entitled "The Distribution of the Surplus Magnetization in Rocks of the Iron Ore Formation of the UkrSSR (On the Example of the Kremenchug Deposit)". Very interesting were the reports "The Equipment and Methods of Conducting an Aero-Electroprospecting" by M.M. Snuval-Sergyeyev of the All-Union Institute of Methods and Technique of Geophysical Prospecting

On the Future Ways of the Development of Prospecting Geophysics in the Soviet Union [A Report Based on the Materials of the Vsesoyuzna heofizychna konferentsiya (All-Union Geophysical Conference)]

(Leningrad) and "The Experience Gathered in Applying High-Frequency Electro-Prospecting on the Deposits of Altay and Kareliya" by S.N. Sheynman of the All-Union Institute of Methods and Technique of Geophysical Prospecting (Leningrad). A total of 14 reports was heard by the section of structural geophysics: "The Geological Structure of the Crystalline Envelope of the Earth as it Appears According to Geophysical Data" by R.M. Demets'ka; "The Causes and the Mechanism of the Formation of Depressions of the Earth's Crust" by S.I. Subotin; "The Experience of the Regional Geophysical Work Done on the Example of Ust'-Urt" by Yu.M. Hrachov and others. A number of reports were dedicated to the seismographic investigations, particularly to the results of deep seismographic soundings (Yu.M. Hodin "Regional Complex Investigations on the Russion Plateau"; O.S. Alekseyev "On the Nature of the Basic Deep Waves Recorded by the HSZ Method") and to other new modifications of the seismographic geophysical exploration. A series of reports heard by the above-mentioned section dealt with new methods of mathematical interpretation and geological explanation of results of gravimetric and magnetometric investigations. A special section discussed the problems of

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On the Future Ways of the Development of Prospecting Geophysics in the Soviet Union [A Report Based on the Materials of the Vsesoyuzna heofizychna konferentsiya (All-Union Geophysical Conference)]

designing geophysical equipment and devices (11 reports). S.O. Piddubnyy and L.M. Lubymov of the All-Union Institute of Methods and Technique of Geophysical Prospecting (Leningrad) read on a new gradient-meter of the "IPB" (IRB) type and its utilization in geophysical prospecting. H.A. Petrov and M.R. Bal'sen (Leningrad) reported on new developments of electro-prospecting equipment. Reports were also heard on a new type of a logging station, complete sets of aeroplane and automobile equipment for prospecting ore deposits, new aeromagnetometers, nuclear-resonant magnetoprospecting equipment and on new developments of seismographic equipment. A total of 5 reports was read in the section of industrial geophysics. Of special interest were the reports by D.M. Srebrodol'skyy (Moscow) and Professor V.M. Dakhnov (Moscow) which elucidated the present state and the ways of the future development of the methods of industrial geophysics. Very interesting were also the report by H.O. Cheremens'kyy of the Leningrad Institute of Mining on "The Determination of the Dislocation Zone of the Earth's Natural Thermal Field Around the Borehole and the Rating of Time Necessary for the Reproduction of Thermal Conditions". The final plenary session of the conference has

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S/021/60/000/003/008/010
A232/A029

On the Future Ways of the Development of Prospecting Geophysics in the Soviet Union [A Report Based on the Materials of the Vsesoyuzna heofizychna konferentsiya (All-Union Geophysical Conference)]

unanimously passed a resolution aimed at the future development of prospecting geophysics in the Soviet Union within the coming Soviet Seven-Year Plan.

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S/169/62/000/002/003/072
D228/D301

AUTHOR: Lebedev, T. S.

TITLE: 4th All-Ukrainian Conference of participants of the International Geophysical Year and International Geophysical Collaboration of 1959

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 2, 1962, 3, abstract 2A5 (Mezhdunar. geofiz. god, Inform. byul., no. 3, 1961, 3-7)

TEXT: On January 25-28, 1960, in Kiyev there was a conference at which the results of research fulfilled by Ukranian scientific organizations were presented. The work of the Poltavskaya gravimetricheskaya observatoriya AN UkrSSR (Poltava Gravimetric Observatory, Academy of Sciences, UkrSSR) was described in the report of its director, Z. N. Aksent'yeva. Extensive observations on the latitudinal variations of the town of Poltava were made in accordance with the IGY-IGC program. Experimental work on the study of polar movement from contemporary latitudinal and azimuthal obser-

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4th All-Ukrainian ...

vations has been carried out. Investigations of earth tides have been considerably expanded. V. P. Tsesevich, the director of the Astronomicheskaya observatoriya Odesskogo universiteta (Astronomic Observatory of Odessa University), spoke on the question of meteor research and supplied the main results of research in this field. A series of papers was devoted to the problem of "solar activity". V. A. Chegoryan and V. M. Zhebko (Kafedra radiotekhniki Khar'kovskogo politekhnicheskogo instituta (Department of Radio Engineering, Khar'kov Polytechnic Institute)) reported on an investigation of the horizontal movements of ionization irregularities in the ionosphere. The rates and directions of drift of ionization irregularities were studied in the ionosphere's F- and E-layers. N. N. Yeryushev (Krymskaya astrofizicheskaya observatoriya AN SSSR (Crimean Astrophysical Observatory, Academy of Sciences, USSR)) has studied the change in the parameter of $(N/V)_{eff}$ in the ionosphere's lower layers at the time of solar flares. It was established that the changes in the parameter of $(N/V)_{eff}$ differ for different frequencies at the time of sudden disturbances. A. S. Dvoryashin

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4th All-Ukrainian ...

S/169/62/000/002/003/072
D228/D301

(Crimean Astrophysical Observatory, Academy of Sciences, USSR) investigated the relation of short-period variations of the geomagnetic field to solar and ionosperic corpuscular radiation. M. V. Stovas' paper, which broached the subject of the formation of abyssal planetary fractures in the crust, provoked much discussion. /Abstracter's note: Complete translation./

Card 3/3

LEBEDEV, T.S. [Lebediev, T.S.]; SOBAKAR', G.T. [Sobakar, H.T.]

Recent data on the block structure of the Kal'mius-Mius interfluve. Dop.AN URSR no.6:783-786 '61. (MIRA 14:6)

1. Institut geologicheskikh nauk AN USSR. Predstavleno akademikom AN USSR V. G. Bondarchukom.
(Azov Sea region—Geology, Structural)

LEBEDEV, T.S.

Some results of research under the program of the International Geophysical Year in the Ukraine. Mezhdunar. geofiz. god no.9:54-58 '61. (MIRA 14:3)
(Ukraine—Geophysical research)

LEBEDEV, T.S. [Lebediev, T.S.]; SOBAKAR', G.T. [Sobakar, H.T.]

Tectonics of the northeastern Azov Sea Region by geophysical data. Dop. AN URSR no.10:1341-1345 '61. (MIRA 14:11)

1. Institut geofiziki AN USSR. Predstavleno akademikom AN USSR V.G.Bondarchukom [Bondardhuk, V.H.].
(Azov Sea Region--Geology, Structural)

LEBEDEV, T.S. [Lebediev, T.S.]; SOBAKAR', G.T. [Sobakar, H.T.]

Surface relief of Pre-Cretaceous rocks in the northeastern part of the Sea of Azov region. Dop. AN URSR no.11:1512-1515 '61.
(MIRA 16:7)

1. Institut geofiziki AN UkrSSR. Predstavleno akademikom AN UkrSSR V.G.Bondarchukom [Bondarchuk, V.H.].
(Azov Sea region—Geology, Structural)

LEBEDEV, T.S. [Lebediev, T.S.]; SOBAKAR', G.T. [Sobakar, H.T.]

Some recent data on the density of sedimentary rocks in the southern outskirts of the Donets Basin. Dop. AN URSR no.12: 1601-1605 '61. (MIRA 16:11)

1. Institut geofiziki AN UkrSSR. Predstavleno akademikom AN UkrSSR S.I. Subbotinym.

LEBEDEV, Taras Sergeyevich; SOBAKAR', Grigoriy Timofeyevich; SUBBOTIN, S.I., akademik, otv. red.; ANTONYUK, Ye.I., red.; RAKHLINA, N.P., tekhn. red.

[Tectonics of the northeastern Azov Sea region; based on geophysical data]Tektonika severo-vostochnogo Priazov'ia; po dannym geofizicheskikh issledovanii. Kiev, Izd-vo Akad. nauk USSR, 1962. 82 p. (MIRA 15:10)

1. Akademiya nauk Ukrainskoy SSR (for Subbotin).
(Azov Sea region--Geology, Structural)

LEBEDEV, T.S.; SOBAKAR', G.T.

Some characteristics of the tectonics of the northeastern part of the Azov Sea region, based on geophysical data. Geofiz.sbor. no.1:11-23 '62. (MIRA 16:3)

1. Institut geofiziki AN UkrSSR.
(Azov Sea region--Geology, Structural)

LEBEDEV, T.S.; SOBAKAR', G.T.; OROVETSKIY, Yu.P.; BOLYUBAKH, K.A.

Geologic structure of the conjugated zone of Pokrovo-Kireevskiy and Tel'manovo blocks in the northeastern part of the Azov Sea region. Geofiz.sbor. no.1:32-36 '62. (MIRA 16:3)

1. Institut geofiziki AN UkrSSR.
(Azov Sea region--Geology, Structural)

LEBEDEV, T.S. [Lebediev, T.S.]; SOBAKAR', G.T. [Sobakar, H.T.]; OROVETSKIY, Yu.P. [Orovets'kyi, IU.P.]; BOLYUBAKH, K.A.

Recent data on the geological structure of the zone of junction of the Pokrovo-Kireyevo and Tel'manovo blocks (northeastern part of the region of the Sea of Azov). Dop. AN URSR no.1:91-94 '62. (MIRA 15:2)

1. Institut geofiziki AN USSR. Predstavleno akademikom AN USSR V.G.Bondarchukom [Bondarchuk, V.H.].
(Donetsk Province—Geology, Structural)

SOBAKAR', G.T.; LEBEDEV, T.S.

Taking into account the effect of relief in gravimetric studies in the mountain regions. Geofiz.sbor. no.2:33-40 '62. (MIRA 16:3)

1. Institut geofiziki AN UkrSSR.
(Ukraine—Gravity anomalies)- (Ukraine—Landforms)

LEBEDEV, T.S.; KORNIYETS, D.V.

Experimental studies of physical properties of rocks subjected to high pressures and temperatures. Geofiz.sbor. no.2:118-121 '62.
(MIRA 16:3)

1. Institut geofiziki AN UkrSSR.
(Earth--Surface)

LEBEDEV, T.S.

Conference of geophysicists and astronomers of the Ukraine. Geofiz.-biul. no.12:97-102 '62. (MIRA 16:5)
(Ukraine--Geophysics) (Ukraine--Astronomy)

LEBEDEV, Taras Sergeyevich; KORNIYETS, Dar Vasil'yevich; SUBBOTIN, S.I., akademik, otv. red.; KHOZANET, S.M., red.; TURBANOVA, N.A., tekhn. red.

[Heat of the earth] Teplo Zemli. Kiev, Izd-vo AN Ukr.SSR, 1963. 63 p. (MIRA 16:11)

1. Akademiya nauk Ukr.SSR (for Subbotin).
(Earth temperature)

LEBEDEV, Taras Sergeyevich; SOBAKAR' Grigoriy Timofeyevich; OROVETSKIY, Yuriy Pavlovich; BOLYUBAKH, Klavdiya Antonovna; SUBBOTIN, S.I., akademik, otv. red.; MEL'NIK, A.F., red.izd-va; RAKHLINA, N.P., tekhn. red.

[Tectonics of the central part of the northern slope of the Crimean Mountains and results of its studying; based on geophysical and geological data] Tektonika tsentral'noi chasti severnogo sklona Krymskikh gor i opyt ee izucheniia; po materialam geofizicheskikh i geologicheskikh issledovanii. [By] T.S.Lebedev i dr. Kiev, Izd-vo Akad. nauk USSR, 1963. 85 p. (MIRA 16:5)

1. Akademiya nauk Ukr.SSR (for Subbotin).
(Crimean Mountain--Geology, Structural)

ACCESSION NR: AT4016590 S/2819/63/000/004/0014/0018

AUTHOR: Lebedev, T.S.; Korniyets, D.V.

TITLE: Investigations of the earth's upper mantle in the SSSR

SOURCE: AN UkrRSR. Inst. geofiz. Geofiz. sb., no. 4(6), 1963. Kompleks. geofiz. issled. territor. Ukrainy* (Complex geophysical investigations of the Ukraine), 14-18

TOPIC TAGS: geology, upper mantle, geonomy, cosmogony, earth tide, silica, high pressure, geophysics, silicate, earth core, metallic state, helium, lithium, earthquake, surface wave, seismic wave, velocity profile, travel-time curve, seismology, seismic activity, magneto-telluric method, geomagnetism, magnetic field, earth crust, lava, vulcanism, tectonophysics, deep seismic sounding, Quaternary glaciation, eclogite, ultrabasite.

ABSTRACT: A conference on the theme "The Earth's Upper Mantle" was held in Moscow during the period 24 January - 5 February 1963. A large number of the reports presented already have been published. Summaries of the following reports are given in the conference report. V. V. Belousov -- development of a new earth science to be called geonomy. V. S. Safronov -- theory of the earth's formation by accumulation of solid particles and bodies. N. N. Pariyskiy -- study of the horizontal nonhomogeneities of the mantle on

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ACCESSION NR: AT4016590

the basis of earth tides. P. S. Mantveyev -- anomalies of tidal deformations of the earth's surface in the SSSR. V. A. Magnitskiy and Yu. A. Meshcheryakov -- recent vertical movements of the crust and their geophysical interpretation. Ye. A. Lyubimova -- heat flux on shields in a zone of recent movements. Yu. N. Ryabinin -- influence of high pressure on certain properties of solid bodies. S. M. Stishov -- a rutile-like modification of silica and phase changes in the earth's interior. L. V. Al'tshuller -- shock compression of silicates and metals and possible composition of the earth's mantle and core. V. N. Zharkov and V. A. Kalinin -- determination of the equations of state of rocks at high pressures. V. P. Trubitsyn and F. R. Ulinich -- possible pressures during the transition of helium and lithium into a metallic state. S. A. Fedotov -- new data on the upper mantle in the southern Kurile Islands. N. V. Kondorskaya -- earthquake distribution in the Kurile-Kamchatka arc. Z. S. Ivanov and others -- use of surface waves for study of structure of the upper mantle. N. V. Shebalin -- the upper boundary of the layer of low velocities in the upper mantle. T. B. Yanovskaya and I. Ya. Azbel' -- determination of the velocity profile of the earth's mantle from the travel-time curves of P waves. N. N. Matveyev and A. S. Alekseyev -- use of a computer to find variants of structure of the upper mantle best fitting travel-time curves for deep-focus earthquakes. V. P. Orlov -- anomalies of secular variation of seismic activity in Tadzhikistan and the East European Platform. A. N. Tikhonov and others -- electromagnetic parameters of the upper mantle as determined by the magnetotelluric method. V. I. Pochtarev -- importance of the mantle in studies of geomagnetism.

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ACCESSION NR: AT4016590

T. N. Simonenko -- the anomalous magnetic field of the SSSR. V. V. Belousov -- structure and development of the earth's crust and upper mantle. Yu. M. Sheynman -- composition and origin of lavas and structure of the upper mantle in the North Atlantic region. G. S. Gorshkov -- vulcanism and the upper mantle. N. I. Khitrov -- the earth"s crust -- upper mantle transition zone. N. A. Belyayevskiy and V. V. Fedynskiy -- study of great depths in the SSSR. Ye. M. Rudich -- structure and development of the earth's crust in East Asia. I. V. Litvinenko -- structure of the earth's crust on the Baltic shield using deep seismic sounding data. M. V. Gzovskiy -- problems in tectonophysics, associated with study of the upper mantle. G. Z. Gurariy and I. A. Solov'yev -- structure of the crust and density of matter in the mantle. S. A. Ushakov -- isostatic state of regions of Quaternary glaciation. G. D. Afanas'yev -- relationships between the upper mantle and crust. N. P. Vasil'kovskiy -- differentiation of matter and formation of the crust. I. P. Kosminskaya -- stratification of the earth's crust as indicated by deep seismic sounding. G. B. Udintsev -- relief of the Pacific Ocean floor. V. I. Popov -- formations and relationship to deep structure of the crust. G. S. Shteynberg and M. I. Zubin -- relationship between vulcanism and development of geological structures. I. A. Yefimov -- the eclogite formation of Northern and Southern Kazakhstan. S. V. Moskalev -- genesis of ultrabasite in relation to upper mantle processes. Orig. art has: no graphics.

ASSOCIATION: Institut geofiziki AN UkrSSR (Geophysics Institute, AN UkrSSR)

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LEBEDEV, T.S.; SOBAKAR', G.T.; OROVETSKIY, Yu.P.

Physical properties, composition, and age of crystalline shales, sandstones, and spilite-type rocks in the northeastern Azov Sea region. Geofiz. sbor. no.4:19-27 '63. (MIRA 16:9)

1. Institut geofiziki AN UkrSSR.

ACCESSION NR: AT4016591 S/2819/63/000/004/0112/0123

AUTHOR: Lebedev, T. S.; Korniyets, D. V.

TITLE: Optimum pressure and temperature values for investigation of the physical parameters of matter in the earth crust

SOURCE: AN UkrRSR. Inst. Geofiz. Geofiz. sb., no. 4(6), 1963. Kompleks. Geofiz. issled. territor. Ukrainy* (Complex geophysical investigations of the Ukraine), 112-123

TOPIC TAGS: geology, geophysics, earth crust, rock, high temperature geophysics, high pressure geophysics, Moho

ABSTRACT: The Laboratoriya vy*sokikh davleniy Instituta fiziki Zemli AN SSSR (High Pressure Laboratory, Institute of Geophysics, AN SSSR) has studied the physical properties of certain rocks at pressures up to 5,000 atmospheres and in some cases at temperatures up to 1,000C; still higher pressures are being used at the present time. The Institut geokhimii i analiticheskoy khimii im. akad. I. V. Vernadskogo AN SSSR (Institute of Geochemistry and Analytical Chemistry) is systematically studying geochemical processes at 3,000-5,000 atmospheres and 500-1,000C. Other institutes of the SSSR Academy of Sciences have developed apparatus for research at 30,000-40,000 atmospheres and 1,500-2000C. An attempt is made to esti-

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ACCESSION NR: AT4016591

mate the range of temperatures and pressures which are pertinent for study of the earth's deep structure so that apparatus can be designed to meet these requirements. A review of the literature on pressures at great depths indicates that at 40 kilometers the mean maximum pressure is more than 15,500 kg/cm^2 and hydrostatic pressure at the same depth somewhat exceeds 11,000 kg/cm^2. Experiments at 15,000 kg/cm^2 approximate conditions near the Mohorovicic discontinuity; experiments with a hydrostatic pressure of about 20,000 kg/cm^2 approximate conditions below this discontinuity (where the Moho lies at a depth of 45-50 km). Postulated temperatures at various depths are reviewed. Special attention is given to shield areas, since the authors have a particular interest in the Ukrainian shield. At depths of 30 km temperatures range from about 600C to as much as 1,000C in special cases. It is concluded that laboratory studies of the behavior of rocks at high pressures and temperatures should be formulated to consider pressures of 15,000-20,000 kg/cm^2 and temperatures of 500-1,000C. Initial efforts should be limited to 15,000 kg/cm^2; as experience is accumulated the experimental temperatures can be increased. However, in designing apparatus the need for ultimately making investigations at 20,000 kg/cm^2 must be given serious consideration. Orig. art. has: 2 formulas and 2 tables.

ASSOCIATION: INSTITUT GEOFIZIKI AN UKRSSR (Geophysics Institute, AN Ukr SSR)
SUBMITTED: 01Mar63 DATE ACQ: 11Mar64 ENCL: 00
SUB CODE: AS NO REF SOV: 000 OTHER: 000
Card 2/2

LEBEDEV, T.S. [Lebediev, T.S.]; SOBAKAR', G.T. [Sobakar, G.T.]; OROVETSKIY, Yu.P. [Orovets'kyi, IU.P.]; BOLYUBAKH, K.A.

New data on the tectonics of the central part of the northern slope of the Crimean Mountains on the basis of the materials of geophysical studies. Dop. AN URSR no.3:386-390 '63. (MIRA 17:10)

1. Institut geofiziki AN UkrSSR. Predstavleno akademikom AN UkrSSR S.I. Subbotinym.

LEBEDEV, T.S.; BOLYUKH, K.A.

Subsurface crustal structure of the Crimea and the Black-Azov Sea basin according to geophysical studies. Geofiz. sbor. no.8:18-26 '64. (MIRA 18:6)

1. Institut geofiziki AN UkrSSR.

L 27996-66 EWA(h)/EWT(1) GW

ACC NR: AT6005987 (N) SOURCE CODE: UR/3169/65/000/001/0087/0105

AUTHOR: Lebedev, T. S. (Candidate of geological-mineral sciences); Shapoval, V. I.; Savenko, B. Ya.

ORG: none

TITLE: Physical properties of bottom deposits in the equatorial belt of the Atlantic Ocean

SOURCE: AN UkrSSR. Geofizicheskiy sbornik, no. 1(12), 1965. Stroyeniye zemnoy kory i fizicheskiye svoystva gornykh porod (Structure of the earth's crust and physical properties of rocks), 87-105

TOPIC TAGS: ocean dynamics, longitudinal wave, shock wave propagation, ocean property

ABSTRACT: Elastic, electrical, and magnetic properties of samples collected during the XV voyage of the Mikhail Lomonosov research vessel in the western Atlantic are investigated. Using the formula

$$V_{Li} = \sqrt{\frac{E(1-\sigma)}{\rho(1+\sigma)(1-2\sigma)}},$$

and certain corrections (taking into consideration the finite dimensions of the medium) the propagation velocities of longitudinal waves (V_L) were evaluated, where V_{Li}

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L 27996-66
ACC NR: AT6005987

is the velocity of propagation of longitudinal waves in an infinite medium, E is Young's modulus, ρ is the sample density, and σ is the Poisson coefficient. The electrical resistivity of the sample was investigated using the formula

$$R_K = R - \frac{\rho_0}{S_1}(L - l),$$

and some additional concepts where R_K is the resistivity of the sample, R is the resistivity of both the sample and the solution, L is the distance between two electrodes, l is the sample length and S_1 is the cross section of the solution column. The measurement apparatus consisted of 2 electrodes and used an alternating current of 1000 cps. Magnetic susceptibilities of all collected samples were investigated by using a balanced H-shaped magnetic bridge as a pickup. The data show that 1) longitudinal (P_L) waves of samples saturated with ocean water have a propagation velocity of 1300-1600 m/sec and that the propagation velocities for grayish ooze, white ooze and yellowish foraminiferal ooze are 1580, 1510 and 1450 m/sec, respectively; 2) the resistivities of bottom deposits in the western equatorial belt of the Atlantic are dependent mainly on the lithologic and mechanical properties of the deposits varying from 0.5-0.9 Ω. The foraminiferal ooze, however, has resistivities up to 9Ω; 3) the magnetic susceptibilities of the bottom deposits vary from $1\text{-}40 \cdot 10^{-6}$ CGSM; and 4) the vibratory motions of the ship affect the reliability of seismic evaluations. Orig. art. has: 2 tables, 7 figures.

SUB CODE: 08/ SUBM DATE: 29Aug64/ ORIG REF: 018/ OTH REF: 012

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SOURCE CODE: UR/0000/66/000/000/0147/0155

ACC NR: AT6034513

AUTHOR: Lebedev, T. S.; Bolyubakh, K. A.

ORG: none

TITLE: Structure of the Earth's crust in the Crimea Mountains and the Black Sea basin according to data from gravimetric investigations

SOURCE: AN SSSR. Otdeleniye nauk o Zemle. Nauchnyy sovet po kompleksnym issledovaniyam zemnoy kory i verkhney mantii. Glubinnoye stroyeniye Kavkaza (Abyssal structure of the Caucasus). Moscow, Izd-vo Nauka, 1966, 147-155

TOPIC TAGS: Mohorovicic discontinuity, earth gravity, earth crust, granitic layer, basaltic layer, ~~deep-seismic sounding~~ seismology, tectonics, Crimean Mountains, Black Sea basin

ABSTRACT: The correlation of available data on the structure of the Earth's crust in the Crimean Mountains and the Black Sea basin made it possible to compile a generalized gravity-anomaly map (not given in the test) for this region. In the area of the Black Sea, a large, positive anomaly, 10—35-km wide, extending over a significant part of the Crimean meganticlinorium is superposed on a background of a smoothly varying gravity field. A region characterized by somewhat reduced gravity values borders the positive anomaly field of the Crimean Mountains from the side of the Black Sea. Two very intense positive gravity anomalies are found in the central part of the Black Sea. The deep-seismic-sounding and gravity data were utilized in preparing 3 cross sections of the Earth's crust.

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ACC NR: AT6034513

Qualitative calculations indicate that the intense positive gravity anomalies of the western Caucasus Crimea and the Island of Cyprus are associated with either an upwarping of the basaltic layer or with an intrusion of a body of basic and ultrabasic rocks into the upper layers of the Earth's crust. Orig. art. has: 4 figures. [WA-794]

SUB CODE: 08/ SUBM DATE: 26Feb66/ ORIG REF: 030/ OTH REF: 005/

Card 2/2

LEBEDEV, V., kapitan dal'nego plavaniya

Experience in preparing and carrying out navigation in the eastern part of the Arctic. Mor.flot. no.6:7-9 Je '59. (MIRA 12:9)

(Arctic regions--Navigation)

SOV/137-58-11-22191

Translation from: Referativnyy zhurnal. Metallurgiya. 1958, Nr 11, p 51 (USSR)

AUTHOR: Lebedev, V.

TITLE: Technological Progress and Rise in Labor Productivity in the USSR Copper Industry (Tekhnicheskiy progress i povysheniye proizvoditel' nosti truda v mednoy promyshlennosti SSSR)

PERIODICAL: [Uch. zap.] Akad. obshchestv. nauk, 1958, Nr 32, pp 70-105

ABSTRACT: An examination is made of the significance of technological progress, and in particular of the mechanization and automation of production, the introduction of the latest equipment and advanced processes, and also of replacement and modernization of outdated equipment for the purpose of attaining a higher level of and a rapid rise in labor productivity in the copper industry.

A. P.

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LEBEDEV, V.

84-12-29/49

AUTHOR: Lebedev, V., Engineer

TITLE: Starting the Engines of the Tu-104 in Winter (Osobennosti zapuska dvigateley Tu-104 zimoy)

PERIODICAL: Grazhdanskaya aviatsiya, 1957, Nr 12, p 18 (USSR)

ABSTRACT: The author discusses different factors which determine the behavior of engines at low ambient temperatures, such as the fuel ignition delay in the turbostarter and the engine, and the following flame-up of the accumulated fuel. Methods of preheating the starter according to the prevailing conditions are described. Another major factor affecting the start of the engines is the viscosity of the lubricant and hydraulic drive oil, which increases considerably not only with lowering temperature, but also with its time in use.

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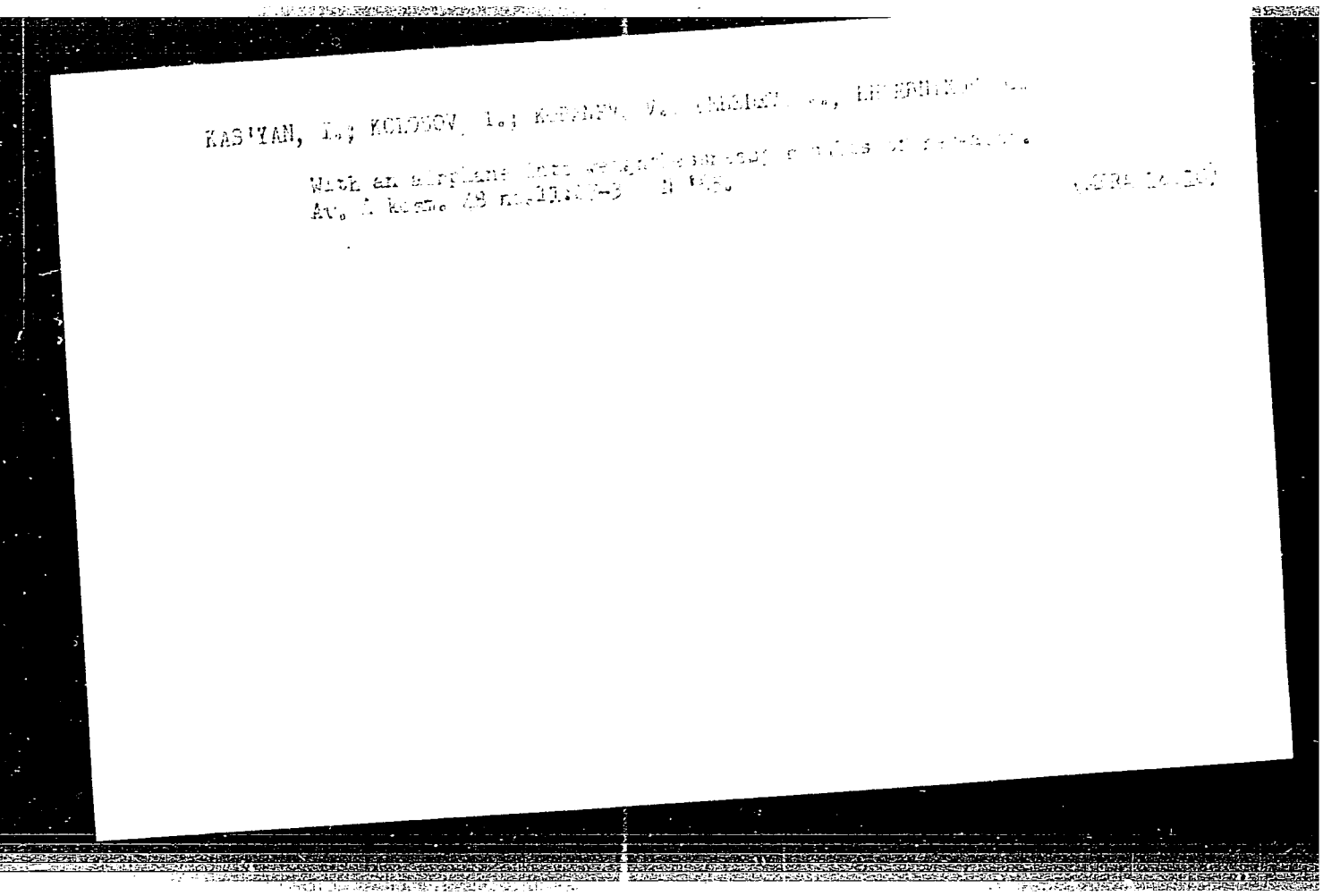

LEBEDEV, V., kand. med. nauk; KUZNETSOV, O., vrach-psikholog

Silence. Av. i kosm. 47 (ekstr. vyp.):59-64 O '64. (MIRA 18:3)

VASIL'YEV, B.; LEBEDEV, V.

High-quality tires for motor vehicles. Avt. transp. 43 no.1: 17-18 Ja '65. (MIRA 18:3)

1. Yaroslavskiy shinnyy zavod.

SOV/84-58-9-33/51

AUTHOR: Lebedev, V., Engineer

TITLE: Tune-up of Tu-104 Engines (Osobennosti otladki dvigateley samoleta Tu-104)

PERIODICAL: Grazhdanskaya aviatsiya, 1958, Nr 9 pp 28-29 (USSR)

ABSTRACT: Tune-up of turbojet engines of Tu-104 airliners has become necessary as a part of aircraft maintenance. This applies especially to the starting and pick-up phases of engine operation. The tune-up consists, in the main, in improving the runup time of the engine. The article serves as a provisional instruction for engine maintenance personnel of airports and maintenance workshops. The main concern of the author is how to avoid compressor stalling in the initial, and overheating of the exhaust jet in the later phase of the runup. Three graphs accompany the text.

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LEBEDEV, V.

Fertilizers go to the fields. Mest.prom.i khud.promys. 2 no.3:22 Mr '61. (MIRA 14:4)

1. Zamestitel' nachal'nika oblastnogo upravleniya mestnoy promyshlennosti, Kaluga.
(Phosphate industry)

LEBEDEV, V., podpolkovnik

Demonstration of methods is the most important factor. Voen.vest. 40 no.10:51-52 O '60. (MIRA 14:5)
(Military education)

L 52736-65 EWT(m)/EWA(h) Pab UR/0367/65/001/004/0639/0646

ACCESSION NR: AP5013110

AUTHOR: Apalin, V.; Gritsyuk, Yu.; Kutikov, I.; Lebedev, V.; Mikaelyan, L.

TITLE: Neutron emission from fragments of U^{233}, U^{235}, and Pu^{239} in thermal-neutron fission

SOURCE: Yadernaya fizika, v. 1, no. 4, 1965, 639-646

TOPIC TAGS: nuclear fission, thermal neutron fission, fission fragment, neutron emission, symmetric fission

ABSTRACT: This is a continuation of earlier measurements (ZhETF v. 43, 329, 2053, 1962; Nucl. Phys. v. 38, 193, 1962 and v. 41, 92, 1963; ZhETF v. 46, 1197, 1964) of the total number of neutrons emitted by fragments as a function of their mass ratio. In the present work the authors measured the neutron emission from fragments of U^{233}, U^{235}, and Pu^{239} separated by an improved technique, and discuss the accuracy of the information obtained. The experimental technique was the same as in the earlier work, with the fragment mass determination made by means of a double-grid ionization chamber and a liquid-organic scintillator neutron detector. To assess

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ACCESSION NR: AP5013110

the reliability of the information obtained in the symmetric-fission region, the experimental mass distribution was compared with the results of radiochemical studies (J. Katcoff, Nucleonics v. 18, No. 11, 201, 1960). Good agreement with these data was found everywhere except in the symmetric-fission region, where the present data lie somewhat above the values of Katcoff. It is estimated that not more than 30% and more likely 15--20% of the events in symmetric fission are spurious. An attempt is made to deduce a correlation between the neutron emission data and the dynamics of the fission process at low excitation energies. "The authors thank J. Milton for sending his tables, and B. Geylikman and V. Strutinskiy for interesting discussions." Orig. art. has: 6 figures and 3 formulas.

ASSOCIATION: None

SUBMITTED: 160ct64

NR REF SOV: 005

ENCL: 00

OTHER: 012

SUB CODE: NP

Card 2/2

LEBEDEV, V., inzh.

Simplification of continuous beam calculations. Rech. transp. 21 no.3:39-42 Mr '62. (MIRA 15:4)
(Beams and girders, Continuous)

L 8918-66 FSS-2/EWT(1)/FS(v)-3 DD

ACC NR: AP5026191 SOURCE CODE: UR/0259/65/000/008/0027/0029

AUTHOR: Lebedev, V. (Candidate of medical sciences)

ORG: None

TITLE: State of weightlessness and the "end of the world"

SOURCE: Nauka i tekhnika, no. 8, 1965, 27-29

TOPIC TAGS: psychopathology, cerebral cortex, otolaryngology, weightlessness, flight physiology, flight disorientation

ABSTRACT: On the basis of increasing literature data, the psychophysiological reactions of individuals to a state of weightlessness have been divided into three groups. The first group includes persons who experience no discomfort, maintain their work capacity, and enjoy freedom of movement. The second group includes persons who experience anxiety, discomfort, and fear in the first 4 to 6 sec of disorientation followed by a feeling of pleasant excitation and complete relaxation. The present article is primarily concerned with the third group which reacts violently by developing symptoms of seasickness or an "end of the world" complex. In the latter case, the illusion of falling becomes very real and the subject experiences anxiety, terror and grief for 1 to 2 minutes as he actually "sees" people dying, buildings and

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ACC NR: AP5026191

nature being destroyed, and the world literally coming to an end. This type of complex has been compared to Meniere's disease and is attributed to a functional disturbance of the brain as a result of a vestibular analyzer disorder. Weightlessness of the vestibular analyzer otoliths affects the transmission of impulses to the brain. Disorientation produced by weightlessness also affects the nerve impulses transmitted from the skin surface, skeletal muscles, and cardiovascular system to the brain. When the brain is unable to integrate and analyze properly these changed and sometimes distorted nerve impulses, there develops a psychophysiological reaction of the "end of the world" type. Psychophysiological reaction differences of individuals to weightlessness are largely determined by auditory analyzer sensitivity and also sensitivity to physical strain. Orig. art. has: 4 figures.

SUB CODE: 06, 05/ SUBM DATE: 00/ ORIG REF: 000/ OTH REF: 000

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L 10805-66 FSS-2/EWT(1)/FS(v)-3 DD/RD

ACC NR: AP6000254 SOURCE CODE: UR/0209/65/000/011/0027/0032

AUTHOR: Kas'yan, I.; Kopanev, V.; Lebedev, V.; Khlebnikov, G.; Kolosov, I.

ORG: none

TITLE: On an airplane in a state of weightlessness. Results of research

SOURCE: Aviatsiya i kosmonavtika, no. 11, 1965, 27-32

TOPIC TAGS: human physiology, space physiology, weightlessness, parabolic flight

ABSTRACT: Cosmonaut training flights in aircraft equipped with a weightlessness tank are described. Some physiological parameters of the trainees during various stages of the flight are discussed. One series of tests performed on a dynamometer showed that, compared to horizontal flights, during weightlessness the amount of maximum muscular force which can be exerted is reduced by 6—12 kg for the right hand and 4—12 kg for the left hand. This decrease in muscular force is probably connected with the decreased tonus of the skeletal muscles and functional changes in the central nervous system during weightlessness. The coordinograph, a device for measuring changes in fine coordination movements, recorded the total work time for each test, the number of errors, and the time of one movement. Although no disruption in coordination was observed when these tests were conducted during parabolic flight, most cosmonauts showed some lag in the speed of execution of motor acts. Orig. art. has: 2 figures. [JS]

SUB CODE: 06 SUBM DATE: none/

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L 07850-67 EWT(1) SCTB DD

ACC NR: AP6028039 SOURCE CODE: UR/0025/66/000/005/0111/0113

AUTHOR: Kuznetsov, O. (Psychiatrist); Lebedev, V. (Candidate of medical sciences)

ORG: none

TITLE: Isolation

SOURCE: Nauka i zhizn', no. 5, 1966, 111-113

TOPIC TAGS: isolation test, nervous system, psychologic stress, psychopathology

ABSTRACT: This popular article based on the literature discusses the phenomenon of hallucinations reported by astronauts and experimental subjects under conditions of prolonged isolation and lack of activity. To determine the nature of this phenomenon, various experiments have been conducted in mockup space capsules and soundproof test chambers with the subject isolated from external stimuli. Some subjects lose their sense of time, some develop anxieties, and others experience delusions, illusions and hallucinations. These states in themselves are not symptomatic of mental disease as they may appear in healthy individuals when some factor e.g. lighting, prevents accurate, visual or auditory perception. Various cases are cited. During prolonged periods of isolation the psychic state of the person is very important, particularly fatigue, anxiety and fear. Another type of hallucination found to appear is characterized by visual and auditory mental images becoming so vivid that they become

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L 07850-67
ACC NR: AP6028039

a reality for the subject. The vividness of the images is caused by the reduced number of stimuli acting on the sensory organs. Under normal conditions the vividness of mental images (recollections, wishes, ideas) is damped by numerous real stimuli making the former appear very pale and indistinct by comparison. The two different theories explaining the origin of hallucinations are not incompatible. With higher nervous system and brain disorders induced by prolonged isolation, vivid mental images may become hallucinations; and, in turn, illusions and delusions may become hallucinations. Possibly, hallucinations found in mental illnesses also have two different origins. Further study of the problem is vital for aviation and space travel as well as for persons engaged in monotonous tasks under conditions of prolonged isolation. Orig. art. has: none.

SUB CODE: 05/ SUBM DATE: none

Card 2/2 mc

Lebedev, V. A.

AUTHORS: Kononov, B. N., Lebedev, V. A., Serkin, L. A., 119-1-4/13
Stepanenko, I. P., Filippov, A. G.

TITLE: Experiences With a Newly-Developed Register Operating With Laminar Semiconductor Triodes (Opyt razrabotki registra na ploskostnykh poluprovodnikovykh triodakh)

PERIODICAL: Priborostroyeniye, 1958, Nr 1, pp. 10-13 (USSR)

ABSTRACT: The possibilities are shown of how to use semiconductor triodes in numerical calculating machines. By means of a block of "movable registers", the scheme of which is given, the possibility of its application is proved. The register mentioned can take up a numerical code and pass it on to the left or right but it can also store a numerical code no longer needed.

The main block is a decoder which brings about a comparison of the states of neighbouring triggers. A switch-diagram is given for the triggers. The radio-technical units used are discussed. It is most useful to employ triodes with common emitters for the amplifiers used. With such connections and with the aid of a transformer tuning as well as of an R-C-member as corrector in the emitter

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Experiences With a Newly-Developed Register Operating With Laminar Semiconductor Triodes

119-1-4/13

circuit a maximum amplification even of short impulses can be reached. With a certain arrangement to a 10 - 14 fold power amplification can be reached with a duration of the input pulse of 0,5 µs. There are 6 figures and 3 references, all of which are Slavic.

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1. Triodes-Application

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MASLIKOV, V.A., kand.tekhn.nauk; LEBEDEV, V.A.; ARUTYUNYAN, N.S., inzh.; AGARYSHEV, D.F., inzh.

Experience in the use of hydrocyclones for the purification of sunflower seed micelle. Masl.-zhir.prom. 29 no.1:27-30 Ja '63. (MIRA 16:2)

1. Krasnodarskiy institut pishchevoy promyshlennosti (for Maslikov, Lebedev). 2. Zaporozhskiy maslozhirovoy kombinat (for Arutyunyan, Agaryshev).

(Oil industries—Equipment and supplies)

LEBEDEV, V.A.

Effect of ecologic conditions on the resistance and susceptibility of cotton plants to pests and diseases. Vop. ekol. 7:95-96 '62. (MIRA 16:5)

1. Sel'skokhozyaystvennyy institut, Samarkand.
(Samarkand Province--Cotton--Disease and pest resistance)

LEBEDEV, V.A., kand.biolog.nauk

Oriental fruit moth. Zashch. rast. ot vred. i bol. 8 no.12:46 D '63. (MIRA 17:3)

POLYANSKIY, Viktor Ivanovich; LEBEDEV, V.

Gusev. Kaliningrad, Kaliningradskoe knizhnoe izd-vo, 1963. 50 p. (MIRA 17:4)

LEBEDEV, V., kand.med.nauk

Adynamia in space flight. Av.i kosm. 46 no.9:21-24 S '63.
(MIRA 16:10)

LEBEDEV,V., kand. med. nauk

Man in weightlessness; psychophysiological reactions. Av. i kosm. 47 no.9:77-82 S '64 (MIRA 17:8)

L 41343-65 EEC-2/EWG(j)/EWT(d)/EWG(r)/EWT(l)/EWP(m)/EWT(m)/FS(v)-3/EWP(w)/
EEC(k)-2/EWG(v)/EWP(v)/T-2/EWG(a)-2/EWP(k)/EWG(c)/EWA(h) Pd-1/Po-4/Pe-5/Pq-4/
ACCESSION NR: AP5002726 S/0025/64/000/012/0015/0018
Pac-4/Pf-4/Pae-2/Peb/Pi-4
TI/DD/EM/RD/GW

AUTHOR: Lebedev, V. (Candidate of medical sciences)

TITLE: The crew of an interplanetary space ship

SOURCE: Nauka i zhizn', no. 12, 1964, 15-18

TOPIC TAGS: spacecraft, interplanetary travel, psychophysiology, medical training

ABSTRACT: The problems concerning the personnel of a crew that might take the long voyage to Mars or Venus are examined. Many professions need to be represented, and since the ship will not carry one member of each profession required, each astronaut must be proficient in several professions. It is supposed that such a ship may carry 4-6 men, some of whom must be engineers, but one must certainly be a doctor. In such cramped quarters, compatibility will be a vital factor. The author cites several examples of the problem from expeditions and from actual tests. He feels that the communist peoples, because of their morale in communistic upbringing, are better prepared than capitalistic peoples. He thinks tests should be made, however, under simulated interplanetary conditions. It is not enough to know merely a person's characteristics and responses; he may respond differently in

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ACCESSION NR: AP5002726

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different groups. It is best that a group be made up of people not only bound together by the current goal but by deeper and more sympathetic ties. The members must be psychophysiologically compatible. The main theme of the author's discussion is the need for doctor-astronauts, the need to train doctors for this specific purpose, to train them to operate in confined and inadequate quarters, to observe people for emotional as well as physical problems. The author considers the problem of improving apparatus in the spacecraft to make the doctor's work as favorable as possible. Orig. art. has: 2 figures.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00

SUB CODE: SV, PH NO REF SOV: 000 OTHER: 000

Card 2/2

LEBEDEV, V. A., Cand Biol Sci -- (diss) "Susceptibility and resistance of cotton and other plants to injuries ~~in-~~ (caused them) ~~flicted~~ by the spider mite ." Samarkand, 1957. 16 pp (Min of Agr USSR, Uzbek Agr Inst im V. V. Kuybyshev), 100 copies (KL, 1-58, 117)

LEBEDEV, V.A.

USSR / Cultivated Plants. Plants for Technical Use. M
Oil Plants. Sugar Plants.

Abs Jour : Ref Zhur - Biol., No 8, 1958, No 34725

Author : Lebedev, V. A.
Inst : Not given
Title : On the Resistance of Cotton Plants to Spider mites

Orig Pub : Sots. s. kh. Uzbekistana, 1957, No 4, 22-24.

Abstract : Field experiments conducted in 1955-56 with various varieties of cotton plants have shown that those plants which absorbed N and P during their entire vegetation period are more resistant to spider mites. The yield of the cotton plant in in these areas increased by 2.5 hwt per hectare solely as a result of the gain achieved through lessening of the harmful effects of spider mites -- Smirnov.

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USSR/Cultivated Plants - Commercial. Oil-Bearing. Sugar-Bearing. M

Abs Jour : Ref Zhur Biol., No 12, 1958, 53697

Author : Lebedev, V.A

Inst :

Title : The Effect of Biological Peculiarities of the Plants and Ecological Factors on the Resistance of the Cotton Plant to Spider Mites.

Orig Pub : Khlopkovodstvo, 1957, No 6, 40-42

Abstract : The cotton plant varieties which are conducive to mites are those in which the thickness of the lower epidermis and of the spongy parenchyma of the leaf measures 129.6-136.5 i.e., a thickness which does not exceed the length of the piercing bristles of the mite. This permits the mite to feed on the contents of the chlorophyll-bearing palisade parenchyma. The cotton plant varieties favorable to the mite are also those with a porous structure of the leaf cells (8.2-9.8 cells per unit of area

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measurement in the microscopic objective); and varieties with 6.61-8.17 atm. osmotic pressure of the cell juice. Favorable ecological conditions for the development of the plant and unfavorable conditons for the feeding and activity of the mite are created by the following: the square-pocket placement of the plants; optimum irrigation - 6 vegetation waterings of 900-1200 m^3/ha, application of 30% of the yearly rate of phosphorus fertilizers with the first top-dressing (during the 2-3 leaf stage) and the balance of phosphorus in subsequent top-dressing. -- A.P. Adrianov

LEBEDEV, V.A.

Cotton resistance to the damages by Tetranychus urticae Koch. Dokl. AN Uz. SSR no.6:53-55 '57. (MIRA 11:5)

1. Institut zoologii i parazitologii AN UzSSR. Predstavleno akademikom AN UzSSR V.V. Yakhontovym.
(Cotton--Disease and pests)

KLADOV, Nikolay Dmitriyevich; VLASOV, Aleksey Vladimirovich; LEBEDEV, V.A., red.; TIKHONOVA, I.M., tekhn.red.

[Let's carry out the seven-year plan in five years; from the work practice of collective and state farms in Volosovo District] Semiletku v piat' let; iz opyta raboty kolkhozov i sovkhozov Volosovskogo raiona. Leningrad, Lenizdat, 1959. 92 p.
(Volosovo District--Agriculture) (MIRA 13:7)